

Listing of Claims:

This listing of claims will replace all prior versions, and listing, of claims in the application.

1. (Previously Amended) A system comprising:

a library of flanges adapted for different standard flange interfaces; and

a waveguide adaptor assembly for coupling a waveguide to a radio, antenna, waveguide or other standard flange interface, comprising:

an adaptor having a waveguide side adapted to be connected to a waveguide and an opposed flange side having a predetermined flange coupling interface, and

a flange selected from said library of flanges, said flange having a flange interface side adapted to mate with a particular standard flange interface, and an opposed adaptor side configured to mate with said predetermined flange coupling interface on said adaptor;

wherein said flange coupling interface is configured to mate with any of said different standard flange interfaces.
2. (Cancelled)
3. (Original) The waveguide adaptor assembly of Claim 1 wherein said adaptor is fastener-connected to said flange.
4. (Original) The waveguide adaptor assembly of Claim 1 wherein said adaptor is soldered to said waveguide.
5. (Original) The waveguide adaptor assembly of Claim 1 wherein said adaptor is fastener-connected to said flange and soldered to said waveguide.
6. (Original) The waveguide adaptor assembly of Claim 1 wherein said adaptor has on said flange side a central opening surrounded by a recess adapted to receive a gasket.

7. (Previously Amended) The waveguide adaptor assembly of Claim 1 wherein said flanges in said library of flanges have on said adaptor side a common provision configured to mate with said predetermined flange coupling interface of said adaptor.
8. (Original) The waveguide adaptor assembly of Claim 7 wherein said provision includes a raised portion.
9. (Previously Amended) A waveguide adaptor useful for coupling a waveguide to a radio, antenna, waveguide or other standard flange interface, said adaptor having a waveguide side adapted to be connected to a waveguide and an opposed flange side having a predetermined flange coupling interface adapted to be connected to a flange selected from a library of flanges adapted for different standard flange interfaces; wherein said flange coupling interface is configured to mate with any of said different standard flange interfaces.
10. (Original) The waveguide adaptor of Claim 9 wherein said adaptor is adapted to be fastener-connected to the selected flange.
11. (Original) The waveguide adaptor of Claim 9 wherein said adaptor is soldered to said waveguide.
12. (Original) The waveguide adaptor of Claim 9 wherein said adaptor is adapted to be fastener connected to said selected flange and is soldered to said waveguide.
13. (Original) The waveguide adaptor of Claim 9 wherein said adaptor has on said flange side a central opening surrounded by a recess adapted to receive a gasket.
14. (Previously Amended) For use in a waveguide adaptor assembly for coupling a waveguide to a radio, antenna, waveguide or other standard flange interface, a library of flanges, each having a flange interface side adapted to mate with a different standard flange interface, and an opposed side configured to mate with an adaptor connected to a waveguide; wherein each of said flanges in said library of flanges has on said opposed side a provision common to all flanges in said library which is configured to mate with said adaptor.

15. (Cancelled)
16. (Previously Amended) The library of flanges of Claim 14 wherein said provision includes a raised portion.
17. (Previously Amended) A combination comprising:
 - a library of flanges adapted for different standard flange interfaces;
 - a radio, antenna, waveguide or other structure having a standard flange interface; and
 - a waveguide adaptor assembly for coupling a waveguide to said standard flange interface, comprising:
 - an adaptor having a waveguide side adapted to be connected to a waveguide and an opposed flange side having a predetermined flange coupling interface; and
 - a flange selected from said library of flanges adapted for different standard flange interfaces, said flange having a flange interface side adapted to mate with a particular standard flange interface, and an opposed adaptor side configured to mate with said predetermined flange coupling interface on said adaptor;wherein said flange coupling interface is configured to mate with any of said different standard flange interfaces.
18. (Cancelled)
19. (Original) The combination of Claim 17 wherein said adaptor is fastener-connected to said flange.
20. (Original) The combination of Claim 17 wherein said adaptor is soldered to said waveguide.
21. (Original) The combination of Claim 17 wherein said adaptor is fastener-connected to said flange and soldered to said waveguide.
22. (Original) The combination of Claim 17 wherein said adaptor has on said flange side a central opening surrounded by a recess adapted to receive a gasket.

23. (Previously Amended) The combination of Claim 17 wherein said flanges in said library of flanges have on said adaptor side a common provision configured to mate with said predetermined flange coupling interface of said adaptor.
24. (Original) The combination of Claim 23 wherein said provision includes a raised portion.
25. (Previously Amended) A system comprising:
- a waveguide;
 - a plurality of waveguide flanges, wherein said waveguide flanges have a generally common internal mating configuration:
 - at least one flange adaptor having inner and outer surfaces and wherein said outer surface is adapted to engage said generally common internal mating configuration of said waveguide flanges and said inner surface is adapted for secured mounting to said waveguide;
 - at least one clamping member adapted for fastening to select ones of said waveguide flanges; and
 - at least one fastener for securing said at least one flange adaptor between said at least one clamping member and said select ones of said waveguide flanges such that said waveguide and said at least one flange adaptor mounted thereto may be coupled to select ones of said waveguide flanges for use therewith.
26. (Original) The system as set forth in Claim 25, wherein said waveguide is generally rectangular in cross sectional configuration.
27. (Previously Amended) The system as set forth in Claim 26, wherein said one of a plurality of waveguide flanges comprises a generally rectangular waveguide flange adapted for mounting to said generally rectangular waveguide and said at least one flange adaptor includes a generally rectangular passageway disposed therethrough and adapted for axial alignment with, and mating engagement of, said generally rectangular waveguide.

28. (Previously Amended) The system as set forth in Claim 26, wherein said one of a plurality of waveguide flanges comprises a waveguide flange that is generally round in shape, having a generally rectangular passageway disposed therethrough adapted for axial alignment with and mating engagement of said generally rectangular waveguide.

29. (Previously Amended) The system as set forth in Claim 26, wherein said outer surface of said at least one flange adaptor includes a generally rectangular mating flange disposed peripherally therearound with a generally rectangular passageway disposed therethrough and adapted for axial alignment with, and mating engagement, of said rectangular waveguide.

30. (Previously Amended) The system as set forth in Claim 26, wherein said inner surface of said at least one flange adaptor comprises a generally rectangular sleeve adapted for receiving said one of a plurality of waveguide flanges therein, said sleeve having a shoulder disposed thereacross for the abutting engagement of an end of said waveguide thereagainst.

31. (Previously Amended) The system as set forth in Claim 25, wherein said one of a plurality of waveguide flanges is constructed with a plurality of apertures disposed therein adapted for the receipt of threaded flange fasteners therethrough for the coupling of said one of a plurality of waveguide flanges to a mating surface such that the waveguide is coupled thereto.

32. (Original) The system as set forth in Claim 25, wherein said inner surface of said at least one flange adaptor comprises a waveguide mounting region adapted for receiving an end of said waveguide therein for the secured mounting thereto.

33. (Previously Amended) The system as set forth in Claim 32, wherein said waveguide is generally rectangular in cross sectional configuration and wherein said at least one flange adaptor is constructed with a generally rectangular passageway disposed therethrough for axial alignment with and secured mounting to said generally rectangular waveguide.

34. (Original) The system as set forth in Claim 33, wherein said rectangular waveguide is secured to said waveguide mounting region of said at least one flange adaptor with solder.

35. (Original) The system as set forth in Claim 25, wherein said outer surface of said at least one flange adaptor includes a groove adapted for the receipt of a gasket therein for providing sealing engagement with said one of a plurality of waveguide flanges secured thereto.

36. (Original) The system as set forth in Claim 25, wherein said at least one flange adaptor includes at least one aperture therethrough wherein said at least one fastener comprises a threaded plate fastener extending through said at least one aperture into said one of a plurality of waveguide flanges.

37. (Original) A flange adaptor assembly for coupling one of a plurality of waveguide flanges to a waveguide, wherein said waveguide flanges have a generally common internal mating configuration, said flange adaptor assembly comprising:

a flange adaptor having inner and outer surfaces and wherein said outer surface is adapted to engage said generally common internal mating configuration of said waveguide flanges and said inner surface is adapted for secured mounting to said waveguide; and

a clamp for securing said at least one of a plurality of waveguide flanges to said outer surface of said flange adaptor such that said waveguide and said flange adaptor mounted thereto may be coupled to said select ones of said waveguide flanges for use therewith.

38. (Original) The assembly as set forth in Claim 37, wherein said clamp includes at least one clamping member for engaging said flange adaptor and at least one fastener for securing said at least one flange adaptor between said at least one clamping member and said select ones of said waveguide flanges.

39. (Original) The assembly as set forth in Claim 37, wherein said waveguide is generally rectangular in cross sectional configuration.

40. (Previously Amended) The assembly as set forth in Claim 38, wherein said one of a plurality of waveguide flanges comprises a generally rectangular waveguide flange adapted for mounting to said generally rectangular waveguide and said at least one flange adaptor includes a generally rectangular passageway disposed therethrough and adapted for axial alignment with and mating engagement of said generally rectangular waveguide.

41. (Previously Amended) The assembly as set forth in Claim 39, wherein said one of a plurality of waveguide flanges comprises a waveguide flange that is generally round in shape, having a generally rectangular passageway disposed therethrough adapted for axial alignment with and mating engagement of said generally rectangular waveguide.

42. (Previously Amended) The assembly as set forth in Claim 39, wherein said outer surface of said at least one flange adaptor includes a generally rectangular mating flange disposed peripherally therearound with a generally rectangular passageway disposed therethrough and adapted for axial alignment with and mating engagement of said rectangular waveguide.

43. (Original) The assembly as set forth in Claim 39, wherein said inner surface of said at least one flange adaptor comprises a generally rectangular sleeve adapted for receiving said one of a plurality of waveguide flanges therein, said sleeve having a shoulder formed thereacross for the abutting engagement of an end of said waveguide thereagainst.

44. (Previously Amended) The assembly as set forth in Claim 37, wherein said one of a plurality of waveguide flanges is constructed with a plurality of apertures disposed therein adapted for the receipt of threaded flange fasteners therethrough for the coupling of said one of a plurality of waveguide flanges to a mating surface such that the waveguide is coupled thereto.

45. (Original) The assembly as set forth in Claim 44, wherein said at least one flange adaptor includes at least one aperture therethrough wherein said at least one fastener comprises a threaded plate fastener extending through said at least one aperture into said one of a plurality of waveguide flanges.

46. (Original) The assembly as set forth in Claim 37, wherein said inner surface of said at least one flange adaptor comprises a waveguide mounting region adapted for receiving an end of said waveguide therein for the secured mounting thereto.
47. (Previously Amended) The assembly as set forth in Claim 46, wherein said waveguide is generally rectangular in cross sectional configuration and wherein said flange adaptor is constructed with a generally rectangular passageway disposed therethrough for axial alignment with and secured mounting to said generally rectangular waveguide.
48. (Original) The assembly as set forth in Claim 47, wherein said rectangular waveguide is secured in said waveguide mounting region of said flange adaptor with solder.
49. (Original) The assembly as set forth in Claim 37, wherein said outer surface of said at least one flange adaptor includes a groove adapted for the receipt of a gasket therein for providing sealing engagement with said one of a plurality of waveguide flanges secured thereto.
50. (Original) The assembly as set forth in Claim 37, wherein said at least one flange adaptor includes at least one aperture therethrough wherein said at least one fastener comprises a threaded plate fastener extending through said at least one aperture into said one of a plurality of waveguide flanges.
51. (Previously Amended) A method for coupling one of a plurality of waveguide flanges to a waveguide, said method comprising the steps of:

providing said plurality of waveguide flanges, each of said plurality of waveguide flanges having a generally common internal mating configuration;

forming a flange adaptor having inner and outer surfaces and wherein said outer surface is adapted to engage said generally common internal mating configuration of said waveguide flanges and said inner surface is adapted for secured mounting to a said waveguide; and

clamping said at least one of a plurality of waveguide flanges to said outer surface of said flange adaptor such that said waveguide and said flange adaptor mounted thereto may be coupled to said select ones of said waveguide flanges for use therewith.

52. (Original) The method as set forth in Claim 51, wherein said waveguide is generally rectangular in cross sectional configuration and said step of forming said flange adaptor includes forming said inner surface in a generally rectangular configuration.

53. (Original) The method as set forth in Claim 52 and further including the step of providing said one of a plurality of waveguide flanges in a generally rectangular configuration adapted for mounting to said generally rectangular waveguide and the step of forming said at least one flange adaptor with a generally rectangular passageway therethrough and axially aligning said passageway with said generally rectangular waveguide for the securement thereto.

54. (Original) The method as set forth in Claim 53, wherein said securement of said axially aligned passageway to said generally rectangular waveguide includes the step of flowing molten solder therebetween.

55. (Original) The method as set forth in Claim 54, and further including the step of forming said at least one flange adaptor with at least one aperture therethrough whereby at least one threaded plate fastener can be extended through said at least one aperture into said one of a plurality of waveguide flanges.

56. (New) A system comprising:

a library of flanges adapted for different standard flange interfaces; and

a waveguide adaptor assembly for coupling a waveguide to a radio, antenna, waveguide or other standard flange interface, comprising:

an adaptor having a waveguide side adapted to be connected to a waveguide and an opposed flange side having a predetermined flange coupling interface, and

a flange selected from said library of flanges, said flange having a flange interface side adapted to mate with a particular standard flange interface, and an opposed adaptor side configured to mate with said predetermined flange coupling interface on said adaptor; wherein said flange coupling interface is configured to mate with any of said different standard flange interfaces and wherein said adaptor is soldered to said waveguide.